

Department of Energy

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with the IEC metric equivalents, including a frame size that is between two consecutive NEMA frame sizes or their IEC metric equivalents;

(2) Has performance in accordance with NEMA Design C characteristics as described in MG1 or an equivalent IEC design(s) such as IEC Design H;

(3) Is a close-coupled pump motor;

(4) Is a footless motor;

(5) Is a vertical solid shaft normal thrust motor (as tested in a horizontal configuration) built and designed in a manner consistent with MG1;

(6) Is an eight-pole motor (900 rpm); or

(7) Is a polyphase motor with a voltage rating of not more than 600 volts, is not rated at 230 or 460 volts (or both), and cannot be operated on 230 or 460 volts (or both).

NOTE TO DEFINITION OF GENERAL PURPOSE ELECTRIC MOTOR (SUBTYPE II): With the exception of the NEMA Motor Standards MG1-1967 (incorporated by reference in § 431.15), references to "MG1" above refer to the 2009 NEMA MG1-2009 (incorporated by reference in § 431.15). References to "IEC" above refer to IEC 60034-1, 60034-12, 60050-411, and 60072-1 (incorporated by reference in § 431.15), as applicable.

IEC means the International Electrotechnical Commission.

IEEE means the Institute of Electrical and Electronics Engineers, Inc.

NEMA means the National Electrical Manufacturers Association.

Nominal full-load efficiency means, with respect to an electric motor, a representative value of efficiency selected from the "nominal efficiency" column of Table 12-10, NEMA MG1-2009, (incorporated by reference, see § 431.15), that is not greater than the average full-load efficiency of a population of motors of the same design.

NEMA design B general purpose electric motor [Reserved]

NEMA Design B motor means a squirrel-cage motor that is:

(1) Designed to withstand full-voltage starting;

(2) Develops locked-rotor, break-down, and pull-up torques adequate for general application as specified in sections 12.38, 12.39 and 12.40 of NEMA MG1-2009 (incorporated by reference, see § 431.15);

(3) Draws locked-rotor current not to exceed the values shown in section

12.35.1 for 60 hertz and 12.35.2 for 50 hertz of NEMA MG1-2009; and

(4) Has a slip at rated load of less than 5 percent for motors with fewer than 10 poles.

Open motor means an electric motor having ventilating openings which permit passage of external cooling air over and around the windings of the machine.

Special purpose motor means any motor, other than a general purpose motor or definite purpose motor, which has special operating characteristics or special mechanical construction, or both, designed for a particular application.

Total power loss means that portion of the energy used by an electric motor not converted to rotational mechanical power, expressed in percent.

[69 FR 61923, Oct. 21, 2004, as amended at 74 FR 12071, Mar. 23, 2009; 77 FR 26633, May 4, 2012]

TEST PROCEDURES, MATERIALS INCORPORATED AND METHODS OF DETERMINING EFFICIENCY

§ 431.14 Sources for information and guidance.

(a) *General*. The standards listed in this paragraph are referred to in the DOE procedures for testing laboratories, and recognition of accreditation bodies and certification programs but are not incorporated by reference. These sources are given here for information and guidance.

(b) *NVLAP*. National Voluntary Laboratory Accreditation Program, National Institute of Standards and Technology, 100 Bureau Drive, M/S 2140, Gaithersburg, MD 20899-2140, 301-975-4016, or go to <http://www.nist.gov/nvlap/>. Also see <http://www.nist.gov/nvlap/nvlap-handbooks.cfm>.

(1) NVLAP Handbook 150, Procedures and General Requirements, February 2006.

(2) NVLAP Handbook 150-10, Efficiency of Electric Motors, February 2007.

(3) NIST Handbook 150-10 Checklist, Efficiency of Electric Motors Program, (2007-05-04).

(4) NVLAP Lab Bulletin Number: LB-42-2009, Changes to NVLAP Efficiency

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of Electric Motors Program, March 19, 2009.

(c) *ISO/IEC*. International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland/International Electrotechnical Commission, 3, rue de Varembe, P.O. Box 131, CH-1211 Geneva 20, Switzerland.

(1) ISO/IEC Guide 25, General requirements for the competence of calibration and testing laboratories, 1990.

(2) ISO Guide 27, Guidelines for corrective action to be taken by a certification body in the event of either misapplication of its mark of conformity to a product, or products which bear the mark of the certification body being found to subject persons or property to risk, 1983.

(3) ISO/IEC Guide 28, General rules for a model third-party certification system for products, 2004.

(4) ISO/IEC Guide 58, Calibration and testing laboratory accreditation systems—General requirements for operation and recognition, 1993.

(5) ISO/IEC Guide 65, General requirements for bodies operating product certification systems, 1996.

[77 FR 26634, May 4, 2012]

§ 431.15 Materials incorporated by reference.

(a) *General*. The Department of Energy incorporates by reference the following standards and test procedures into subpart B of part 431. The Director of the Federal Register has approved the material listed for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to a standard by the standard-setting organization will not affect DOE regulations unless and until DOE amends its test procedures. Material is incorporated as it exists on the date of the approval, and a notice of any change in the material will be published in the FEDERAL REGISTER. All approved material is available for inspection at the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, Sixth Floor, 950 L'Enfant Plaza SW., Washington, DC 20024, (202) 586-2945, or go to http://www1.eere.energy.gov/buildings/appliance_standards/. Also, this mate-

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rial is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) *CSA*. Canadian Standards Association, Sales Department, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6, Canada, 1-800-463-6727, or go to <http://www.shopcsa.ca/onlinestore/welcome.asp>.

(1) CSA C390-10, Test methods, marking requirements, and energy efficiency levels for three-phase induction motors, March 2010, IBR approved for §§ 431.12; 431.19; 431.20; appendix B to subpart B of part 431.

(2) [Reserved]

(c) *IEC*. International Electrotechnical Commission Central Office, 3, rue de Varembe, P.O. Box 131, CH-1211 GENEVA 20, Switzerland, +41 22 919 02 11, or go to <http://webstore.iec.ch>.

(1) IEC 60034-1 Edition 12.0 2010-02, (“IEC 60034-1”), Rotating Electrical Machines, Part 1: Rating and Performance, February 2010, IBR approved as follows: section 4: Duty, clause 4.2.1 and Figure 1, IBR approved for § 431.12.

(2) IEC 60034-12 Edition 2.1 2007-09, (“IEC 60034-12”), Rotating Electrical Machines, Part 12: Starting Performance of Single-Speed Three-Phase Cage Induction Motors, September 2007, IBR approved as follows: clauses 5.2, 5.4, 6, and 8, and Tables 1, 2, 3, 4, 5, 6, and 7, IBR approved for § 431.12.

(3) IEC 60050-411, International Electrotechnical Vocabulary Chapter 411: Rotating machines, 1996, IBR approved as follows: sections 411-33-07 and 411-37-26, IBR approved for § 431.12.

(4) IEC 60072-1, Dimensions and Output Series for Rotating Electrical Machines—Part 1: Frame numbers 56 to 400 and flange numbers 55 to 1080, 1991, IBR approved as follows: clauses 2, 3, 4.1, 6.1, 7, and 10, and Tables 1, 2 and 4, IBR approved for § 431.12.

(d) *IEEE*. Institute of Electrical and Electronics Engineers, Inc., 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, 1-800-678-IEEE (4333), or <http://www.ieee.org/web/publications/home/index.html>.